

IN THE CLAIMS

The following listing of claims is provided in accordance with 37 C.F.R. § 1.121.

1. (currently amended) A method for producing an image from image data comprising:
 - accessing stored image data from a memory, the image data defining an input image acquired using an imaging system;
 - determining a pixel sampling rate for the image data;
 - determining a desired sampling rate, wherein the desired sampling rate is determined based at least partially on a point-spread function of the imaging system or the frequency content of the image data;
 - comparing the pixel sampling rate to [[a]] the desired sampling rate; and
 - ~~determining a shrink parameter based upon the comparison; and~~
 - based upon the comparison, processing the image data, including by shrinking [[an]]
the input image if the pixel sampling rate is greater than the desired sampling rate based
upon the shrink parameter, wherein the shrink parameter is a ratio of the pixel sampling rate
to the desired sampling rate when a redundancy metric is below a predetermined threshold.
2. (previously presented) The method of claim 1, wherein the desired sampling rate is a Nyquist rate of sampling for the image.
3. (canceled)
4. (original) The method of claim 1, wherein the pixel sampling rate is determined based upon a display field of view and a size of pixels in the field of view.
- 5.-7. (canceled)

8. (currently amended) A method for producing an image from image data comprising:

- accessing stored image data from a memory, the stored image data defining an input image previously acquired by an imaging system using a first pixel sampling rate;
- determining a second pixel desired sampling rate for the image data, wherein the second sampling rate is a desired sampling rate;
- determining a pixel sampling rate for the image data;
- comparing the pixel sampling rate to the desired sampling rate to determine a redundancy metric; and
- calculating a shrink parameter as a ratio of the first pixel sampling rate to the desired sampling rate; and
- processing the image data, ~~wherein the image data is processed~~ by shrinking the input image defined by the image data based at least partially on ~~by a~~ the shrink parameter if the shrink parameter is greater than one based upon the redundancy metric.

9.-10. (canceled)

11. (currently amended) The method of claim [[8]] 31, wherein processing the image data ~~is processed by~~ further comprises resampling the image data.

12. (original) The method of claim 11, wherein the image data is resampled to match the desired sampling rate.

13. (previously presented) The method of claim 8, wherein the desired sampling rate is a Nyquist rate of sampling for the image.

14. (currently amended) The method of claim 8, wherein the desired sampling rate is determined based at least partially on a point-spread function of the imaging system, or the frequency content of the image data.

15. (canceled)

16. (currently amended) A system for processing image data, the system comprising:

a memory circuit for storing image data, the image data defining an input image acquired by a data acquisition system at a first pixel sampling rate; and

a processing circuit for accessing the image data from the memory circuit, determining a second pixel desired sampling rate for the image data, the second pixel sampling rate being a desired sampling rate ~~determining a pixel sampling rate for the image data, comparing the pixel sampling rate to the desired sampling rate to determine a redundancy metric, calculating a shrink parameter as a ratio of the first pixel sampling rate to the desired sampling rate, and processing the image data by shrinking the input image defined by the image data based at least partially on the shrink parameter if the shrink parameter is greater than one upon the redundancy metric;~~

~~wherein the processing circuit is configured to shrink an image defined by the data by a shrink parameter based upon the redundancy metric.~~

17.-18. (canceled)

19. (currently amended) The system of claim [[16]] 33, wherein the processing circuit is further configured to process the image data by resampling the image data.

20. (original) The system of claim 19, wherein the image data is resampled to match the desired sampling rate.

21. (canceled)

22. (currently amended) The system of claim [[21]] 16, wherein the data acquisition system is selected from a group consisting of a CT system, an MRI system, an ultrasound system, an X-ray system, a tomosynthesis system, and a PET system.

23. (currently amended) A system for producing an image from image data comprising:

means for accessing stored image data from a memory, the image data defining an input image acquired using an imaging system;

means for determining a pixel sampling rate for the image data;

means for determining a desired sampling rate, wherein the desired sampling rate is determined based at least partially on a point-spread function of the imaging system or the frequency content of the image data;

means for comparing the pixel sampling rate to [[a]] the desired sampling rate;

means for determining a shrink parameter based upon the comparison; and

means for processing the image data ~~by including~~ shrinking [[an]] the input image if, based upon the comparison, the pixel sampling rate is greater than the desired sampling rate based upon the shrink parameter, wherein the shrink parameter is a ratio of the pixel sampling rate to the desired sampling rate when a redundancy metric is below a predetermined threshold.

24. (currently amended) A system for producing an image from image data comprising:

means for accessing stored image data from a memory, the stored image data defining an input image previously acquired by an imaging system using a first pixel sampling rate;

means for determining a second pixel ~~desired~~ sampling rate for the image data, wherein the second pixel sampling rate is a desired sampling rate;

means for determining a pixel sampling rate for the image data;

means for calculating a shrink parameter as a ratio of the first pixel sampling rate to the desired sampling rate

means for comparing the pixel sampling rate to the desired sampling rate to determine a redundancy metric; and

means for processing the image data, wherein the image data is processed by shrinking the image defined by the image data based at least partially on [[a]] the shrink parameter if the shrink parameter is greater than one based upon the redundancy metric.

25. (currently amended) A computer readable medium storing a computer program for producing an image from image data comprising:

code stored on the computer readable medium encoding routines for accessing stored image data defining an input image from a memory, determining a pixel sampling rate for the image data, determining a desired sampling rate, comparing the pixel sampling rate to [[a]] the desired sampling rate and, based upon the comparison, determining a shrink parameter based upon the comparison, and processing the image data by, including shrinking [[an]] the input image if the pixel sampling rate is greater than the desired sampling rate; based upon the shrink parameter, wherein the shrink parameter is a ratio of the pixel sampling rate to the desired sampling rate when a redundancy metric is below a predetermined threshold.

wherein the desired sampling rate is determined based at least partially on a point-spread function of the imaging system or the frequency content of the image data.

26. (currently amended) A computer readable medium storing a computer program for producing an image from image data comprising:

code stored on the computer readable medium encoding routines for accessing stored image data from a memory, the stored image data defining an input image previously acquired by an imaging system using a first pixel sampling rate, determining a second pixel desired sampling rate for the image data, the second pixel rate being a desired sampling rate, determining a pixel sampling rate for the image data, comparing the pixel sampling rate to

~~the desired sampling rate to determine a redundancy metric, calculating a shrink parameter as a ratio of the first pixel sampling rate to the desired sampling rate, and processing the image data, wherein the image data is processed by shrinking the image defined by the image data based at least partially on the by a shrink parameter if the shrink parameter is greater than one based upon the redundancy metric.~~

27. (new) The method of claim 1, wherein shrinking the input image is at least partially based upon a shrink parameter.

28. (new) The method claim 27, wherein the shrink parameter is a ratio of the pixel sampling rate to the desired sampling rate.

29. (new) The method of claim 1, wherein processing the image data does not comprise shrinking the input image if the pixel sampling rate is less than the desired sampling rate.

30. (new) The method of claim 8, wherein processing the image data does not comprise shrinking the input image defined by the image data if the shrink parameter is less than one.

31. (new) The method of claim 8, wherein shrinking the input image defined by the image data is further based upon a redundancy metric determined based upon a display field of view and a size of pixels in the field of view.

32. (new) The system of claim 16, wherein the processing circuit is configured to not shrink the input image defined by the image data if the shrink parameter is less than one.

33. (new) The system of claim 16, wherein shrinking the input image defined by the image data is further based upon a redundancy metric determined based upon a display field of view and a size of pixels in the field of view.

34. (new) The system of claim 16, wherein the desired sampling rate is determined based at least partially on a point-spread function of the data acquisition system, or the frequency content of the image data.